REMARKS

Status of Claims:

Claims 10-33 are present for examination.

Prior Art Rejection:

Claims 10-33 are rejected under 35 U.S.C. 102(b) as being fully met by Suenaga (U.S. Patent Number 6,784,352).

With respect to claims 10-33, the rejection is respectfully traversed.

Applicant has claimed priority to U.S. Application Number 08/886,180 filed July 1, 1997, and to Japanese Application Number 8-193986 filed July 4, 1996. The Suenaga reference is a continuation of U.S. Application Number 09/710, 619, which has a U.S. filing date of November 9, 2000.

Therefore, applicant claims priority over the Suenaga reference based on the earlier U.S. and Japanese priority filing dates. Indeed, applicant's U.S. priority date predates the effective U.S. filing date of the Suenaga reference by several years. Accordingly, Suenaga is not prior art, and applicant requests that the rejection based on the Suenaga reference be withdrawn.

Obviousness Rejection:

Claims 10-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nomura (U.S. Patent Number 4,947,725) in view of Heybeck (U.S. Patent Number 729,936).

With respect to claims 10-33, the rejection is respectfully traversed.

Independent claim 10 recites an electronic percussion instrument system comprising:

> "a barrel section having a generally hollow interior and a first end open to the generally hollow interior;

a head disposed in a tensioned state across the first end of the barrel section to define a percussion surface for receiving a percussion impact and a second surface facing opposite the percussion surface, **the head having a head material through which air may pass**;

a cushioning member in communication with the second surface of the head, **while allowing air to pass through the head**;

a transducer disposed in communication with the cushioning member, to receive percussion impact signals through the cushioning member in response to a percussion impact on the percussion surface of the head."

An electronic percussion instrument system including the above-quoted features has the advantage that the electronic percussion instrument system has a head having a head material through which air may pass and the electronic percussion instrument system has a cushioning member in communication with a surface of the head while allowing air to pass through the head. By allowing air to pass through the head, a percussion sound in a case where the head is percussed can be made small. (Specification; page 3, lines 13-15; page 12, lines 14-16).

Neither Nomura nor Heybeck, alone or in combination, disclose or suggest an electronic percussion instrument system including the above-quoted features with a head having a head material through which air may pass and a cushion member in communication with a surface of the head while allowing air to pass through the head. The Examiner stated that, "Nomura does not explicitly disclose the head having a head material through which air may pass." The Examiner then pointed to Heybeck as disclosing a drumhead through which air may pass and stated that, "[i]t would have been obvious to one of ordinary skill in the art to adapt the Nomura teachings with those of Heybeck so as to allow for air to pass through the drumhead and allow for more muting of the drum and a better tone." The rejection is respectfully traversed, at least for the following three reasons.

First, the drumhead disclosed in Heybeck does not allow for air to pass through. While Heybeck employs a woven fabric head material, Heybeck describes the head as composed of "one or more thicknesses of woven fabric" that are "gummed together and treated on their outer

faces with a stiffening composition composed of shellac, mercury, oxalic acid, and salt." (Heybeck; lines 15-20.) Such a composition, when applied to the surfaces of Heybeck's fabric material, will harden and fill any gaps in the fabric material, thus forbidding air to pass through. Indeed, Heybeck teaches to create acoustic sounds ("softer and sharper tones are produced" Heybeck; lines 79-83) and does not teach or suggest a drumhead that allows air to pass through to dampen or reduce acoustic sound. Because Heybeck is concerned with forming an acoustic drumhead to make acoustic drum sounds, Heybeck teaches away from forming a drum head that allows air to pass through. Accordingly, combining Heybeck with Nomura (as suggested by the Examiner) would not lead to an electronic percussion instrument system including the above-quoted features (which requires a head material through which air may pass).

Second, the cushioning member in Nomura would not allow for air to pass through a head. The electronic drum structure in Nomura employs a vibration plate 18 and cushioning member 20 directly below the standard acoustic-style drumhead 22 and in intimate contact with the drumhead 22. (Nomura; column 4, lines 49-53; column 7, lines 6-9). The vibration plate 18 and the cushioning member 20 each extend over substantially the entire opening of the drum body (barrel) and the cushioning member 20 abuts against the entire bottom (inside) surface of the drumhead 22 (Nomura; Fig. 1, reference numbers 18, 20, 22). Also, the cushioning member 20 comprises an upper cushioning rubber sheet 54 made of an elastic material such as urethane rubber. (Nomura; column 5, lines 55-63). In such an arrangement, the vibration plate 18 and cushioning member 20 would not allow for air to pass through a head.

Third, it would not have been obvious to combine a head that allows for air to pass through with Nomura's electronic drum structure. As discussed above, with the structure in Nomura, the vibration plate 18 and cushioning member 20 would not allow for air to pass through a head. Accordingly, there would be no useful purpose of placing a head that allows for air to pass through on Nomura's electronic drum structure. Replacing Nomura's drumhead with one that allows for air to pass through would have no effect, because air would not be able to pass through the head when installed against the cushioning member 20 and vibration plate 18.

Therefore, independent claim 10 is neither disclosed nor suggested by the cited prior art and, hence, is believed to be allowable.

Because they depend from claim 10, claims 11-22 are believed to be allowable for at least the same reasons that independent claim 10 is believed to be allowable.

Independent claim 23 recites a method of making an electronic percussion instrument system similar to the electronic percussion instrument system of claim 10 and, thus, is believed to be allowable for at least the same reasons that claim 10 is believed to be allowable.

Because they depend from claim 23, claims 24-33 are believed to be allowable for at least the same reasons that independent claim 23 is believed to be allowable.

Conclusion:

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-0872. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-0872.

If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 50-0872.

Respectfully submitted,

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By: _____

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